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EXAMINER	
DANIEL JR, WILLIE J	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/909,039	MAKINEN ET AL.	
	Examiner	Art Unit	
	WILLIE J. DANIEL JR	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-30 and 33-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-30 and 33-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to applicant's amendment filed on 02 April 2008. **Claims 12-30 and 33-55** are now pending in the present application and **claims 1-11 and 31-32** have been canceled. This office action is made **Final**.

Claim Objections

2. The objection applied to the claim is withdrawn, as the proposed claim correction is approved.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 38, 44, 48, and 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. **Claims 38, 44, 48, and 52** include the limitation "…power…is decreased…**above** a predetermined level…is increased… **above** the predetermined level…" as recited in line(s) 10-12 of claim 38. The Examiner requests clarification as to whether or not one of the limitation terms "…**above**…" should be the term "…**below**…".

In response to applicant's argument on pg. 18, 6th par., "…no amendment's required…", the Examiner requests clarification. The claims states "…**decreased** until **the** pseudo error occurrence is **above a** predetermined level, **AND** is increased when **the**

pseudo error occurrence is **above the** predetermined level…". Furthermore, the claims appear to be referring to the same level when stating "…**a** predetermined level…**the** predetermined level…" as there is no difference in the level. What factor constitutes a distinguishing condition to determine whether to increase or decrease transmission power? The Examiner advises applicant to review the instant application (see abstract; pg. 6, lines 6-9).

Regarding **claims 38, 44, 48, and 52**, the claims recite language that is not clear and concise in which the Examiner respectfully request the applicant to clarify the claims. If the applicant considers the current language to be sufficient, the Examiner respectfully requests page(s), line(s), and/or drawing(s) of the instant application that supports the claim language and any supportive comment(s) to help clarify and resolve this issue(s).

4. Due to the current claim language, the Examiner has given a reasonable interpretation of said language and the claims are rejected as broadest and best interpreted. In addition, applicant is welcomed to point out where in the specification the Examiner can find support for this language if Applicant believes otherwise.
5. This list of examples is not intended to be exhaustive. The Examiner respectfully requests the applicant to review all claims and clarify the issues as listed above as well as any other issue(s) that are not listed.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 12-17, 19, 24, 27-30, 33-34, 36-38, and 41-55, are rejected under 35 U.S.C. 102(a) as being anticipated by **Vembu** (**US 6,259,928 B1**).

Regarding **claims 12, 29-30, and 33-34**, Vembu discloses a method (see col. 3, line 65 - col. 4, line 2), comprising:

transmitting a digital signal from a transmitting end (104a-b) to a receiving end (104a-b) of a radio system (e.g., communication system 100) (see col. 4, lines 14-22,27-32; Fig. 1);

receiving said digital signal at the receiving end (104a-b) (see col. 4, lines 14-22,27-32; Fig. 1);

setting an initial value of the transmission power so that no pseudo errors (inherent) are detected (see col. 3, lines 27-29), where the signal quality is high in which "no pseudo errors" would be inherent as evidenced by the fact that one of ordinary skill in the art would clearly recognize,

wherein a pseudo error (inherent) is defined as an instant when a right bit or symbol decision was made, but a margin for the right bit or symbol decision was smaller than a limit value so that an actual error did not occur (see col. 7, lines 8-12,40-44; col. 10, lines 54-59), where the system has an acceptable range of values that allow an error to occur without any system adjustments in which pseudo errors would be inherent and when errors fall outside

the acceptable range an error is detected for system adjustments as evidenced by the fact that one of ordinary skill in the art would clearly recognize;

monitoring pseudo error (inherent) occurrence in the received signal at the receiving end (104a-b) (see col. 7, lines 8-16,40-44; col. 10, lines 54-59; col. 8, lines 5-10);

decreasing the transmission power gradually from the initial value at the transmission end (104a-b) when the pseudo error (inherent) occurrence in an error-free reception does not fulfill a predetermined condition (see col. 7, lines 4-7; col. 5, line 66 - col. 6, line 2); and

increasing the transmission power by a predetermined amount when the pseudo error (inherent) occurrence in the error-free reception fulfills the predetermined condition (see col. 5, lines 41-44,63-65).

Regarding **claim 13**, Vembu discloses the method as claimed in claim 12, further comprising: fulfilling the predetermined condition by detecting the pseudo error (see col. 7, lines 8-12,40-44; col. 10, lines 54-59), where the system has an acceptable range of values that allow an error to occur without any system adjustments in which pseudo errors would be inherent and when errors fall outside the acceptable range an error is detected for system adjustments as evidenced by the fact that one of ordinary skill in the art would clearly recognize.

Regarding **claim 14**, Vembu discloses the method as claimed in claim 12, further comprising: fulfilling the predetermined condition by detecting a second pseudo error within a predetermined time interval after the last pseudo error (see col. 5, lines 33-40).

Regarding **claim 15**, Vembu discloses the method as claimed in claim 12, further comprising: fulfilling the predetermined condition by detecting a predetermined number of

pseudo errors within a predetermined time interval (see col. 5, lines 33-40; col. 7, lines 8-12,40-44; col. 10, lines 54-59), where the system has an acceptable range of values that allow an error to occur without any system adjustments in which pseudo errors would be inherent and when errors fall outside the acceptable range an error is detected for system adjustments as evidenced by the fact that one of ordinary skill in the art would clearly recognize.

Regarding **claim 16**, Vembu discloses the method as claimed in claim 12, further comprising: increasing the transmission power immediately when the pseudo error is detected (see col. 5, lines 41-44,63-65).

Regarding **claim 17**, Vembu discloses the method as claimed in claim 12, wherein the decreasing the transmission power comprising decreasing the transmission power in predetermined steps for a predetermined time period at each step (see col. 7, lines 4-7; col. 5, line 66 - col. 6, line 2).

Regarding **claim 19**, Vembu discloses the method as claimed in claim 12, further comprises:

adjusting the transmission power after the set-up of the radio system to the initial value high enough so that no pseudo errors are detected at the receiving end (see col. 7, lines 8-12,40-44; col. 10, lines 54-59), where the system has an acceptable range of values that allow an error to occur without any system adjustments in which pseudo errors would be inherent and when errors fall outside the acceptable range an error is detected for system adjustments as evidenced by the fact that one of ordinary skill in the art would clearly recognize;

decreasing the transmission power until a first pseudo error is detected (see col. 7, lines 4-7; col. 5, line 66 - col. 6, line 2);

increasing the transmission power in response to the detected pseudo error (see col. 5, lines 41-44,63-65); and

jumping to the decreasing the transmission power until the first pseudo error is detected when no pseudo errors are detected during a predetermined time period after the transmission power has been increased in the increasing the transmission power in response to the detected error (see col. 7, lines 8-16,40-44; col. 10, lines 54-59).

Regarding **claims 24, 27-28, and 37**, Vembu discloses a system (e.g., communication system 100) (see col. 3, line 65 - col. 4, line 2; col. 4, lines 14-22,27-32; Fig. 1), comprising:

at a receiving end (104a-b), a controller configured to monitor pseudo error occurrence in a received signal and to produce a control signal indicating when pseudo errors are detected and when the pseudo error occurrence in an error-free reception is below a predetermined condition (see col. 7, lines 8-16,40-44; col. 10, lines 54-59; col. 8, lines 5-10; Fig. 1),

wherein a pseudo error is defined as an instant when a right bit or symbol decision was made, but a margin for the right bit or symbol decision was smaller than a limit value so that an actual error did not occur (see col. 7, lines 8-12,40-44; col. 10, lines 54-59), where the system has an acceptable range of values that allow an error to occur without any system adjustments in which pseudo errors would be inherent and when errors fall outside the acceptable range an error is detected for system adjustments as evidenced by the fact that one of ordinary skill in the art would clearly recognize; and

at a transmitting end (104a-b), an adjuster configured to adjust transmission power responsive to said control signal by decreasing the transmission power when the pseudo error occurrence in the error-free reception does not fulfill the predetermined condition and by

increasing the transmission power when the pseudo error occurrence fulfills the predetermined condition (see col. 7, lines 4-7; col. 5, line 66 - col. 6, line 2; col. 5, lines 41-44,63-65; col. 8, lines 5-10).

Regarding **claim 36,** Vembu discloses a method (see col. 3, line 65 - col. 4, line 2), comprising:

transmitting a digital signal from a transmitting end (104a-b) to a receiving end (104a-b) of a radio system (e.g., communication system 100) (see col. 4, lines 14-22,27-32; Fig. 1);

receiving said digital signal at the receiving end (104a-b) (see col. 4, lines 14-22,27-32; Fig. 1);

setting an initial value of the transmission power so that no pseudo errors (inherent) are detected (see col. 3, lines 27-29), where the signal quality is high in which "no pseudo errors" would be inherent as evidenced by the fact that one of ordinary skill in the art would clearly recognize,

wherein a pseudo error (inherent) is defined as an instant when a right bit or symbol decision was made, but a margin for the right bit or symbol decision was smaller than a limit value so that an actual error did not occur (see col. 7, lines 8-12,40-44; col. 10, lines 54-59), where the system has an acceptable range of values that allow an error to occur without any system adjustments in which pseudo errors would be inherent and when errors fall outside the acceptable range an error is detected for system adjustments as evidenced by the fact that one of ordinary skill in the art would clearly recognize;

monitoring pseudo error (inherent) occurrence in the received signal at the receiving end (104a-b) (see col. 7, lines 8-16,40-44; col. 10, lines 54-59; col. 8, lines 5-10);

decreasing the transmission power gradually from the initial value at the transmission end (104a-b) when the pseudo error (inherent) occurrence in an error-free reception does not fulfill a predetermined condition (see col. 7, lines 4-7; col. 5, line 66 - col. 6, line 2); and

increasing the transmission power by a predetermined amount when the pseudo error (inherent) occurrence in the error-free reception fulfills the predetermined condition (see col. 5, lines 41-44,63-65);

monitoring the rate of actual errors at the receiving end (see col. 7, lines 8-16,40-62; col. 10, lines 54-59; col. 8, lines 5-10); and

overriding transmission power control based on monitoring of occurrence of pseudo errors by increasing transmission power when actual errors are observed (see col. 5, lines 41-44,63-65), where the power is increased when errors are detected beyond the acceptable range.

Regarding **claims 38, 44, 48, and 52**, Vembu discloses an apparatus (see col. 3, line 65 - col. 4, line 2; col. 4, lines 14-22,27-32; Fig. 1), where the transceivers (104a-b) exchange data in communication system (100), comprising:

a controller configured to monitor pseudo error occurrence in transmissions received from a transmitting end (see col. 7, lines 8-16,40-62; col. 10, lines 54-59; col. 8, lines 5-10),

a pseudo error defining an instant when a right bit or symbol decision is made but a margin for the right bit or symbol decision was smaller than a limit value so that an actual error did not occur (see col. 7, lines 8-12,40-44; col. 10, lines 54-59), where the system has an acceptable range of values that allow an error to occur without any system adjustments in which pseudo errors would be inherent and when errors fall outside the acceptable range an

error is detected for system adjustments as evidenced by the fact that one of ordinary skill in the art would clearly recognize, and

to produce a control signal indicating whether a pseudo error has been detected (see col. 7, lines 8-16,40-44; col. 10, lines 54-59; col. 8, lines 5-10; Fig. 1), and

a generator configured to generate power control messages based on control signals received from said controller, which power control messages are to be transmitted to said transmitted end (see col. 8, lines 5-10), and

wherein the power control messages are generated such that transmission power at said transmitting end is decreased until the pseudo error occurrence is above a predetermined level (see col. 7, lines 4-7; col. 5, line 66 - col. 6, line 2), and

is increased when the pseudo error occurrence is above the predetermined level (see col. 7, lines 4-7; col. 5, line 66 - col. 6, line 2; col. 5, lines 41-44,63-65; col. 8, lines 5-10).

Regarding **claims 41-43**, the claims as applied to claim 38 are rejected for the same reasons as set forth above in **claims 13-15,** respectively.

Regarding **claims 45-47**, the claims as applied to claim 44 are rejected for the same reasons as set forth above in **claims 13-15,** respectively.

Regarding **claims 49-51**, the claims as applied to claim 48 are rejected for the same reasons as set forth above in **claims 13-15,** respectively.

Regarding **claims 53-55**, the claims as applied to claim 52 are rejected for the same reasons as set forth above in **claims 13-15,** respectively.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 18 and **20** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Vembu** (**US 6,259,928 B1**) in view of **Nakano et al**. (hereinafter Nakano) (**US 5,873,028**).

Regarding **claim 18**, Vembu discloses every limitation claimed as applied above in claim 17. Vembu does not specifically disclose having the feature configuring the predetermined step to be 1 dB. However, the examiner maintains that the feature configuring the predetermined step to be 1 dB was well known in the art, as taught by Nakano.

In the same field of endeavor, Nakano at the least discloses the feature configuring the predetermined step to be 1 dB (see col. 6, lines 25-41; col. 7, lines 38-43; col. 5, lines 13-24; Fig. 6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Vembu and Nakano to have the feature wherein a predetermined step is 1 dB, in order to suppress power to a minimum level while satisfying the required communication quality, as taught by Nakano (see col. 8, lines 51-58; col. 9, lines 55-60; col. 10, lines 31-37; col. 1, lines 14-16).

Regarding **claim 20**, Vembu discloses every limitation claimed as applied above in claim 12. Vembu does not specifically disclose having the feature wherein the predetermined amount for increasing the transmission power is 1 or 2 dB. However, the

examiner maintains that the feature wherein the predetermined amount for increasing the transmission power is 1 or 2 dB was well known in the art, as taught by Nakano.

Nakano further discloses the feature wherein the predetermined amount for increasing the transmission power is 1 or 2 dB (see col. 6, lines 25-41; col. 7, lines 38-43; col. 5, lines 13-24; Fig. 6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Vembu and Nakano to have the feature wherein the predetermined amount for increasing the transmission power is 1 or 2 dB, in order to suppress power to a minimum level while satisfying the required communication quality, as taught by Nakano (see col. 8, lines 51-58; col. 9, lines 55-60; col. 10, lines 31-37; col. 1, lines 14-16).

Claims 21-22, 25-26, and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Vembu (US 6,259,928 B1)** in view of **Mallinckrodt (US 5,878,329)**.

Regarding **claim 21**, Vembu as applied to claim 12 teaches of decoding the signal at the receiving end (104a-b) (see col. 4, lines 27-32; col. 7, lines 59-62; Fig. 1), where the system has a modulated signal in which the signal would have to be demodulated (or decoded). Vembu does not specifically disclose having the feature(s) using forward error correction in the transmitted signal; decoding the signal at the receiving end by means of a forward error correction decoder; and interpreting the corrections made by the forward error correction decoder as pseudo errors. However, the examiner maintains the feature(s) using forward error correction in the transmitted signal; decoding the signal at the receiving end by

means of a forward error correction decoder; and interpreting the corrections made by the forward error correction decoder as pseudo errors was well known in the art, as taught by Mallinckrodt.

In the same field of endeavor, Mallinckrodt teaches of

using forward error correction (FEC) in the transmitted signal (see abstract; col. 9, lines 7-41; col. 11, lines 1-21; col. 12, lines 20-35; Figs. 7 and 9),

decoding the signal at the receiving end by means of a FEC decoder (156) (see abstract; col. 9, lines 7-41; col. 11, lines 1-21; col. 12, lines 20-35; Figs. 7 and 9), and

interpreting the corrections made by the decoder as pseudo errors (see abstract; col. 9, lines 7-41; col. 11, lines 1-21; col. 12, lines 20-35; Figs. 7 and 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Vembu and Mallinckrodt to have the feature(s) using forward error correction in the transmitted signal; decoding the signal at the receiving end by means of a forward error correction decoder; and interpreting the corrections made by the forward error correction decoder as pseudo errors, in order to correct errors of a received signal and to have power efficiency by minimizing power transmitted from a source to a user, as taught by Mallinckrodt (see col. 12, line 20-35; col. 13, lines 33-40).

Regarding **claim 22**, Vembu as applied to claim 12 discloses the feature(s) using at the receiving end (104a-b) a demodulator provided with a first set of thresholds and a second set of thresholds for making a decision on whether the pseudo error has occurred (see col. 4, lines 27-32; col. 7, lines 59-62; Fig. 1), where the system has a modulated signal in which the

signal would have to be demodulated (or decoded). Vembu does not specifically disclose the feature making a decision on a received symbol. However, the examiner maintains that the feature making a decision on a received symbol was well known in the art, as taught by Mallinckrodt.

Mallinckrodt further discloses the feature making a decision on a received symbol (see col. 9, lines 35-38; 50-56; Fig. 7), where the symbol detector (152) detects the symbol errors to be interpreted to adjust the power.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Vembu and Mallinckrodt to have the feature making a decision on a received symbol, in order to correct errors of a received signal and to have power efficiency by minimizing power transmitted from a source to a user, as taught by Mallinckrodt (see col. 12, line 20-35; col. 13, lines 33-40).

Regarding **claim 25**, Vembu as applied claim 24 discloses the feature(s) wherein said controller (104a-b) includes a decoder configured to decode a coded signal and configured to detect pseudo errors (see col. 4, lines 27-32; col. 7, lines 59-62; Fig. 1), where the system has a modulated signal in which the signal would have to be demodulated (or decoded). Vembu does not specifically disclose having the feature(s) a forward error correction decoder configured to decode a forward error correction coded signal. However, the examiner maintains that the feature(s) a forward error correction decoder configured to decode a forward error correction coded signal was well known in the art, as taught by Mallinckrodt.

Mallinckrodt further discloses the feature(s) a forward error correction decoder (156) configured to decode a forward error correction coded signal (see abstract; col. 9, lines 7-41;

col. 11, lines 1-21; col. 12, lines 20-35; Figs. 7 and 9), where the FEC decoder decodes the received signal according to the forward error correction to adjust the power.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Vembu and Mallinckrodt to have the feature(s) a forward error correction decoder configured to decode a forward error correction coded signal, in order to correct errors of a received signal and to have power efficiency by minimizing power transmitted from a source to a user, as taught by Mallinckrodt (see col. 12, line 20-35; col. 13, lines 33-40).

Regarding **claim 26**, Vembu as applied to claim 24 discloses the feature(s) wherein said controller (104a-b) includes a demodulator provided with a first set of thresholds and a second set of thresholds for making a decision on whether the pseudo error has occurred (see col. 4, lines 27-32; col. 7, lines 59-62; Fig. 1), where the system has a modulated signal in which the signal would have to be demodulated (or decoded). Vembu does not specifically disclose the feature making a decision on a received symbol. However, the examiner maintains that the feature making a decision on a received symbol was well known in the art, as taught by Mallinckrodt.

Mallinckrodt further discloses the feature making a decision on a received symbol (see col. 9, lines 35-38; 50-56; Fig. 7), where the symbol detector (152) detects the symbol errors to be interpreted to adjust the power.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Vembu and Mallinckrodt to have the feature making a decision on a received symbol, in order to correct errors of a received signal

and to have power efficiency by minimizing power transmitted from a source to a user, as taught by Mallinckrodt (see col. 12, line 20-35; col. 13, lines 33-40).

Regarding **claims 39-40**, the claims as applied to claim 38 are rejected for the same reasons as set forth above in **claims 25-26,** respectively.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Vembu (US 6,259,928 B1**) in view of **Endo et al**. (hereinafter Endo) (**EP 0 847 146 A2).**

Regarding **claim 23**, Vembu discloses the method as claimed in claim 12, further comprising:

monitoring the rate of actual errors at the receiving end (see col. 7, lines 8-16,40-62; col. 10, lines 54-59; col. 8, lines 5-10); and

increasing the transmission power temporarily to the transmission power when a predetermined error rate threshold is exceeded (see col. 6, lines 35-45), where the system is operating at an excess in transmitter power. Vembu does not specifically disclose having the feature(s) increasing the transmission power temporarily to the maximum transmission power. However, the examiner maintains that the feature(s) increasing the transmission power temporarily to the maximum transmission power was well known in the art, as taught by Endo.

In the same field of endeavor, Endo discloses the feature(s)

increasing the transmission power temporarily to the maximum transmission power (see col. 13, lines 13-44; Figs. 3 "303" and 4), where the error rate exceeds the threshold and power is maximum in which the power is at maximum until adjusted to a favorable level.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Vembu and Endo to have the feature(s) increasing the transmission power temporarily to the maximum transmission power, in order to provide a transmission power control apparatus of a mobile communication system, as taught by Endo (see col. 3, lines 36-46).

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Vembu** (**US 6,259,928 B1**) in view of **Tiedemann et al**. (hereinafter Tiedemann) (**US 5,822,318**).

Regarding **claim 35**, Vembu discloses an apparatus (see Figs. 1-2), comprising:

wherein the error signal provides information for producing a control signal, the control signal indicating whether pseudo errors are detected in a received signal and whether the pseudo error occurrence in an error-free reception fulfills a predetermined condition, a pseudo error defining an instant when a right bit or symbol decision was made, but a margin for the right bit or symbol decision was smaller than a limit value so that an actual error did not occur (see col. 7, lines 8-16,40-62; col. 10, lines 54-59; col. 8, lines 5-10). Vembu does not specifically disclose having the features a transmitter configured to output a corrected bit stream, wherein the corrected bit stream is obtained by removing redundancy from a received bit stream; and an error transmitter configured to output an error signal indicating corrections made by the apparatus to obtain the corrected bit stream. However, the examiner maintains that the features a transmitter configured to output a corrected bit stream, wherein the corrected bit stream is obtained by removing redundancy from a received bit stream; and an error transmitter configured to output an error signal indicating corrections made by the

apparatus to obtain the corrected bit stream was well known in the art, as taught by Tiedemann.

In the same field of endeavor, Tiedemann discloses the features a transmitter configured to output a corrected bit stream, wherein the corrected bit stream is obtained by removing redundancy from a received bit stream (see col. 6, lines 59-61; col. 7, lines 7-9,23-29,40-54; col. 5, lines 35-39; Fig. 3), where two outputs is provided by the decoder (56); and

an error transmitter configured to output an error signal indicating corrections made by the apparatus (56) to obtain the corrected bit stream (see col. 6, lines 59-61; col. 7, lines 7-9,23-29,40-54; col. 5, lines 35-39; Fig. 3), where two outputs is provided by the forward error correction decoder (56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Vembu and Tiedemann to have the feature(s) a transmitter configured to output a corrected bit stream, wherein the corrected bit stream is obtained by removing redundancy from a received bit stream; and an error transmitter configured to output an error signal indicating corrections made by the apparatus to obtain the corrected bit stream, in order to provide timely power control that is necessary to provide robust communication link quality under fast fading conditions, as taught by Tiedemann (see col. 2, lines 49-51).

Response to Arguments

8. Applicant's arguments filed 02 April 2008 have been fully considered but they are not persuasive.

The Examiner respectfully disagrees with applicant's arguments as the applied reference(s) provide more than adequate support and to further clarify (see the above claims for relevant citations and comments in this section).

9. Regarding applicant's argument of claim 12 on pg. 19, 2nd full par., "…does not disclose monitoring pseudo error occurrence in the received signal at the receiving end…decreasing the transmission power gradually from the initial value at the transmission end when the pseudo error occurrence in an error-free reception does not fulfill a predetermined condition…and increasing the transmission power by a predetermined amount when the pseudo error occurrence in the error-free reception fulfills the predetermined condition…", the Examiner respectfully disagrees. Applicant has failed to appreciate the teachings of well-known prior art Vembu that clearly discloses the claimed feature(s) as would be clearly recognized by one of ordinary skill in the art. In particular, Vembu discloses the feature(s)

monitoring pseudo error (inherent) occurrence in the received signal at the receiving end (104a-b) (see col. 7, lines 8-16,40-44; col. 10, lines 54-59; col. 8, lines 5-10);

decreasing the transmission power gradually from the initial value at the transmission end (104a-b) when the pseudo error (inherent) occurrence in an error-free reception does not fulfill a predetermined condition (see col. 7, lines 4-7; col. 5, line 66 - col. 6, line 2); and

increasing the transmission power by a predetermined amount when the pseudo error (inherent) occurrence in the error-free reception fulfills the predetermined condition (see col. 5, lines 41-44,63-65). In addition, Vembu discloses the feature(s) wherein a pseudo error (inherent) is defined as an instant when a right bit or symbol decision was made, but a margin for the right bit or symbol decision was smaller than a limit value so that an actual error did not occur (see col. 7, lines 8-12,40-44; col. 10, lines 54-59), where the system has an acceptable range of values that allow an error to occur without any system adjustments in which pseudo errors would be inherent and when errors fall outside the acceptable range an error is detected for system adjustments as evidenced by the fact that one of ordinary skill in the art would clearly recognize. Therefore, as addressed above, the applied reference more than adequately meets the claim limitations.

10. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., pseudo error…a type of error that has not yet occurred. In contrast to a pseudo error…Vembu…directed to SNR, bit error rate and frame error rate…) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding applicant's argument of claim(s) 1 (see pg. 20, 1st - 2nd full par.), the applicant's argument relies on a feature(s) indicated above that is not recited in the claim(s). The applicant indicates that a pseudo error is not a form of signaling error (e.g., SNR, bit

error rate and frame error rate). Since said pseudo error is not a form of signaling error, what constitutes said pseudo error other than an error such as SNR, bit error, and/or frame error?

11. Regarding applicant's argument(s)/comment(s) of claims 13-30 and 33-55, the claims are addressed for the same reasons as set forth above and as applied above in each claim rejection.

12. The Examiner requests applicant to provide support (e.g., page(s), line(s), and drawing(s) as well as comments) for any further amended claim language.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIE J. DANIEL JR whose telephone number is (571)272-7907. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WJD,Jr/

WJD,Jr
18 July 2008

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617